

**AERONAUTICAL CHARTING FORUM**  
**Instrument Procedures Group**  
**Meeting 06-01 – April 18, 2006**

**RECOMMENDATION DOCUMENT**  
**FAA Control # 06-01-262**

**Subject: More flexible Hold-in-lieu Alignment Options for all Public RNAV IAPs**

**Background/Discussion:** When a hold-in-lieu (HIL) of procedure turn is required on any FAA public RNAV SIAP, the HIL alignment with the succeeding intermediate segment must be within 30 degrees. If the SIAP contains LPV minimums, the alignment is limited to within 15 degrees.

Recently, this alignment limitation created a serious airspace and procedure design issue at Alamosa, Colorado (KALS). The limitation appears to be overly restrictive, especially since a straight-line (TF Leg) RNAV initial approach segment can join an RNAV intermediate segment at up to a 90-degree angle with no additional leg length required.

**Recommendations:** Where terrain or airspace issues require an offset RNAV HIL, the maximum permitted offset should be 90 degrees. Further, the offset should be used where necessary to retain optimum intermediate segment descent gradient.

**Comments:** This recommendation affects various RNAV criteria and policy implementation directives.

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**Initial Discussion (Meeting 06-01):** New issue introduced by Rich Boll, NBAA. NBAA is recommending that when a hold-in-lieu-of-procedure-turn is required on a public RNAV procedure, the HIL be increased to 90 degrees. Current criterion is restricted to an offset of 30 degrees from the intermediate segment (15 degrees if LPV minimums are allowed). As the issue was submitted after the suspense, AFS-420 has not had time to perform an in-depth review. Tom Schneider, AFS-420, reported that Jack Corman, the AFS-420 RNAV criteria specialist, stated that from initial review, he doesn't see a problem; however, further study is required. Danny Hamilton, AJW-324, requested interim policy as soon as the study was complete. Tom agreed to forward this request. **ACTION: AFS-420.**

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